

Purchasing Receipts

PO No	Supplier	Line Item No	Ref No	Purchased Item	Description	For Part No	Project ID	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging/Unit Days	Past Due	Total	Supplier Name
PO040267	ACI001-V/C	1	1	Net 30	M303R1.000	303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft			12	7/11/2018	12	S089469	Stock	7/5/2018	\$ 8.70 / ft		1	\$104.43	Acier Ouellette Inc.	
		MT-A513-T-0.875W0.120	3		A513 Seamless Alloy Steel Round Tubing 0.875"dia. x 0.120"" Wall				100	107		S089470	Stock	7/5/2018	\$ 2.36 / ft		1	\$252.47	Acier Ouellette Inc.	
		M304B0.500X012.000	5		304 Bar .500 X 12.00 : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft				6	6		S089471	Stock	7/5/2018	\$ 86.95 / ft		1	\$521.70	Acier Ouellette Inc.	
		M6061TSS1.750X10.000	6		6061T6 SHEET 1.750 X 10.000 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-OO-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive ft				24	24		S089472	Stock	7/5/2018	\$ 22.16 / ft		1	\$531.80	Acier Ouellette Inc.	

7/6/2018

Print

Plex 7/6/2018 8:55 AM *dmatt Tullis Andrew*



ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

CO00096399

Billed to		Shipped to		Customer N°											
				Date											
				Delivery date	Your order N°										
				040267	2018/07/03										
				Eric Kaehlert											
				OUELLETTE VALLEYFIELD											
				Net 30 Days											
Instruction	F/M	Delivery Route	5												
Product Description				Weight	Qty	UM	UM	PCS NB		Internal Use Only					
1	ROUND SS 1 303 (R)			32.04		PI	\$CLB	CMD	EXP	B/O	IN	I	S	C	OUT
	RSS-1303	8519													
	1 X 12' R/L	** CERTIFICATE **													
LINE: 1	Heat: 620M														
2	TUBE MEC 0.875 OD X 1.120 (R)			96.80		100.00	PL \$CPI								
	TME-0875120	6787													
	5 X 20' R/L	** CERTIFICATE **													
LINE: 2	Heat: 17202415														
3	PLATE 4140 HEAT TREAT 1/2 NS			35.73		1.75	P12								
	P4140-12H	8509													
	1 PC 3-1/2" X 6'	** CERTIFICATE **													
LINE: 4	b/o														
4	PLATE SS 1/2 SS304 HRAP RANDOM			129.98		6.00	P12								
	PSS-12	4758													
	1 PC 12" X 6'	** CERTIFICATE **													
LINE: 5	12"X72"														

DELIVERY - CLIENT

Total Weight (LBS) : 70.0
Condition : All sold and delivered materials remain the property of "Acer Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acer Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acer Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within 5 years with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : Verified By :

Delivered By :	Time							
		Customer's Signature						
		<table border="1"> <tr> <td>Y</td> <td>M</td> <td>D</td> </tr> <tr> <td>10</td> <td>00</td> <td>05</td> </tr> </table>	Y	M	D	10	00	05
Y	M	D						
10	00	05						
		Date						

Customer's Signature



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040267

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO040267
PO Date: 6/20/18
Due Date: 6/28/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal Phone: clavoie@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments: quote sou0113485



Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1 ✓ AT		M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft	Firmed	6/28/18	12 ft	✓ 12 ft	12 ft	\$8.7025/ft	\$104.43 AT 18/07/06
2		M304R3.750		304/316 Round Bar Ø3.750 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE	Firmed	7/16/18	3 ft	0 ft	3 ft	\$265.00/ft	\$795.00
3 ✓ AT		MT-A513-T- 0.8750W0.120		A513 Seamless Alloy Steel Round Tubing 0.875"dia. x 0.120" Wall	Firmed	6/28/18	100 ft	✓ 0 ft	100 ft	\$2.3595/ft	\$235.95 AT 18/07/06
4		MT-4140-S-0.500X3.500		AISI 4140 Steel Sheet/Plate : AISI 4140N STEEL SHEET OR PLATE AS PER ASTM A829 OR AMS 6395 MIN: ROCKWELL C = 28 RC MAX: ROCKWELL C = 32 RC	Firmed	6/28/18	6 ft	0 ft	6 ft	\$18.94333/ft	\$113.66

Items											
Line Item	Job	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5		M304B0.500X012.000		304 Bar .500 X 12.00. : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	6/28/18	6 ft	0 ft	6 ft	\$86.95/ft	\$521.70
6		M6061T6S1.750X10.000		6061T6 SHEET 1.750 X 10.000 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive ft	Firmed	6/28/18	24 ft	0 ft	24 ft	\$22.15833/ft	\$531.80

Line Item Note PLEASE CUT BAR IN HALF 6 FT LENGTH

7	M4140H-R0.375		4140 Round Bar .375 : AISI 4140H ROUND BAR PER AISI4140OR ASTM A304-02/A-434-BC/A193-03- GRADE B7/A29-03/A322-91 OR UNS#-G41400 MINIMUM ULTIMATE TENSILE STRENGTH=100 KSI MINIMUM YIELD TENSILE STRENGTH=66KSI receive ft	Firmed	6/28/18	24 ft	0 ft	24 ft	\$1.92125/ft	\$46.11
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Grand Total: \$2,348.65

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 part notification by supplier
A043 retention of quality documents



A048 counterfeit parts avoidance, detection, mitigation and disposition program
A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 6/20/18 1:07 PM dart.lavoie.chantal

94579

Dart.

17565N

operam		MILL CERTIFICATE BS EN 10204/3.1 CERTIFICAT DE RECEPTION NF EN 10204/3.1 ABNAHMEPRUEFZEUGNIS DIN EN 10204/3.1								N-Nr-N 16K0043312-01 V01		A03							
		Certified acc.PED 2014/68/EC Annex I § 4.3 by Certification Body 0036 of TUV SUD Industrie Service GmbH with cert.No.314/2007/MUC. Renounced of counter signature agreed by TÜV SÜD (9/5/2007). Approved acc.AD 2000-Merkblatt W2/TRD 100 by TÜV SÜD Industrie Service GmbH. Confirmation letter from TÜV SÜD Industrie Service GmbH of 07/05/2010 about the uniformity of coils acc.AD2000 W2 §4.1.1																	
Correspondent address: Apcom Genk Svinneenvijverweg 5, Poort Genk 7523 3600 Genk, Belgium Tel. +32 (0)89 30 21 11		Tech.Req.:AD2009W2-AD2000W15-EN13445-2-NR(TUV):01 202 926/W04/007								A02									
Manufacturer's works order number N° de la commande usine productrice Werksauftragsnummer 80287576/02-2063B/338/02		Surveyor's mark Cachet de l'expert Stempel des Werksachverständigen		GNKI		Purchaser and/or consignee Client et/ou destinataire Besteller und/oder Empfänger		Purchaser's order number N° de commande client Kundenbestellnummer I3002		Z05									
Product - Produit - Erzeugnis SHEETS, HOT ROLLED, ANNEALED+PICKLED TOLES, LAMINÉES A CHAUD, REÇUTS+DÉCAPÉES BLECHE, WARMGEWALZT, GEGLÜHT+GEDECKT		A08		Z03		A07													
Steel designation Désignation de l'acier Stahlbezeichnung EN 10028-2:2008 I.4307 / I.4301 ASTM A 240:2015 TYPE 304L J05 ASME SA 140-2013 TYPE 304L J04		Finish Présentation Ausführung		B01		Steelmaking process Möle d'élaboration de l'acier - Stahlherstellungsvorfahren Prod.process: Electric arc furnace - VOD/AOD - Continuous casting Proc.fabr.: Four à arc - VOD/AOD - Coulée continue Fertigungsablauf: Elektro-Ofen - VOD/AOD - Stranggußanlage		A08											
ID NO 1 NO 1		Any supplementary requirements Prescriptions supplémentaires - Zusätzliche Anforderungen		B03		A09													
AMS SS1-H03 -- ASTM A276 (CHEM.COMP) -- ASTM A312(M) (CHEM.COMP) -- MAT MERCURY FREE -- NO WELD REPAIRING												B04							
Identification of the product Identification du produit - Identifizierung des Erzeugnisses MELTED IN BELGIUM, MADE IN BELGIUM		B07		Dimensions Dimensions - Abmessungen				Number of pieces Nb de pièces - Stückzahl		B08		Z06							
Coll n. N.Bobine - Band Nr. 62403821		Bent n. N.Coulée - Schmelze Nr. 624038		B09: Thickness Epaisseur - Stärke 12.70 mm 0.500 "	B10: Width Largeur - Breite 2000.00 mm 78.740 "	B11: Length Longueur - Laenge 3175.00 mm 125.000 "	Net weight Poids net - netto Gewicht		B13		15420 KG								
CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG																			
Required - Exigé %mini Anforderung %maxi		C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P								
Cast Analysis Analyse coulée Analyse Schmelze		0.030	0.75	2.00	8.00	17.50			0.100	0.015	0.045								
		0.023	0.44	1.50	8.00	18.00			0.070	0.005	0.029								
C71 C72 C73 C74 C75 C76 C77 C78 C79 C80 C81 C82 C83 C84 C85 C86		C04		C05		C06		C07		C08		C09							
Positive material identification carried out : OK Tests de vérification de la conformité de la nuance fournie : OK Verwechslungsprüfung wurde durchgeführt : OK																			
Location (1)		MECHANICAL PROPERTIES - PROPRIETES MECANIQUES - MECHANISCHE WERTE EN ISO 6892-1 B / A-SA J70																	
Direction (2)		Room temperature - Température ambiante - Raumtemperatur								Test temperature (°C):									
I	T	Required Exigé Anforderung		Yield or proof strength Limite d'élasticité Dehngrenze KSI		Tensile Strength Résistance à la traction Zugfestigkeit KSI		Elongation after fracture Allongement après rupt. Bruchdehnung %		Hardness Dureté Härte		Yield or proof strength Limite d'élasticité Dehngrenze KSI		Tensile str. Résist. KSI Zugfestigkeit					
		mini maxi		Rp0.2% 30	Rp1% 36	Rm 75 102	A5 45	S90mn 45	HRB	Rp0.2% 92	Rp1% 89	Rm 96	A5						
		Obtained Obtenu Ergebnisse		S6	63	93	55	S2	C16	C31	C18	C17	C18	C19					
Impact strength test Essai de résilience Kerbshlagzähligkeitstest		Corrosion test Test de corrosion Korrosionstest		C11 C14 C12 C13		C15		C16		C17		C18							
C40 K°c) C44		EN (ISO 3651/2 - A:OK		D51		C60		C51		C52		C53		C54		C55		C06	
Location of the sample (1) Emplacement de l'échantillon Lage des Probenabschlütes		The delivery is in accordance with the order La fourniture est conforme aux exigences de la commande Die lieferung entspricht den Bestellbedingungen		Internal cleanliness: A: B: C: D:		C56		C57											
1. Front - Début - Anfang 2. Back - Fin - Ende 3. Middle - Milieu - Mitte		Z01		Packaging list Avis d'expédition LiefercheinNummer		160800665-100564		A10		Organisation inspection Organisation et/ou service contrôle Überwachungsabteilung		A05							
Direction of the test pieces (2) Orientation des éprouvettes Probenrichtung		Marking, inspection and measurement : without objection Contrôle de marquage, d'aspect et de dimensions : satisfaisants Prüfung der Stempelung, des Oberflächenaspekts und der Abmessungen : ohne Beanstandung		D01		Quality Department 31/8/2016		D02											
T. Transverse - Travers - Quer L. Longitudinal - Long - Laengs		The Inspector Le responsable Der Werkssachverständige		D. Raemaekers															
ZSQ701 - PSS																			

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION:
ASTM A276 OR ASTM A240

PART NUMBER:
M304B | TTTT | WWWWW |
THICK | WIDTH |

WHERE "TTT" = THICKNESS IN INCHES
AND "WWWW" = WIDTH IN INCHES

△ EG. 0.5" x 3.0" BAR = M304B0.500X03.000
△ EG. 0.5" x 12.0" PLATE = M304B0.500X12.000

RELEASER
2010-11-30
AN

REV.	DESCRIPTION	BY	DATE
C	ADDED PLATE TO PURCHASE MATERIAL ADDED PLATE FROM 304/316 BAR TO 304/316 BAR/PLATE	MB	10.11.25
B	REFORMAT DWG. ADD SPECS (ZN DS-1), REF PAR 08-020A	CP	09.07.15
A	NEW ISSUE	PH	05.06.10

DESIGN	DRAWN	CHECKED	MFG. APPR.	APPROVED	DE APPR.	DATE
PH	5	4	3	2	1	1

A B C D E F G

H I J K L M N

O P Q R S T U

V W X Y Z

DART AEROSPACE LTD		HAWKESBURY, ONTARIO, CANADA		REV. C	SHEET 1 OF 1
DRAWING NO.	M304B	TITLE	304/316 BARPLATE	NTS	
DATE	10.11.25				

A B C D E F G

H I J K L M N

O P Q R S T U

V W X Y Z

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 304B0.500 X 012.00
 DATE: 18/07/06

PO / BATCH NO.: P0040267/5089471

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 6'
 QUANTITY INSPECTED: 6'
 QUANTITY REJECTED: 0'

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/>	
CORRECT FINISH	Y <input checked="" type="radio"/>	N
CORROSION	Y <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/>	N
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="radio"/>	N
CORRECT THICKNESS	Y <input checked="" type="radio"/>	N
PHOTO REQUIRED	Y <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/>	N
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/>	N
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT/P.D.</u>	SIGNED OFF BY: _____
DATE: <u>18/07/06</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

70079
CERTIFICATE OF TEST
CERTIFICAT D'ESAIIS

Dart.

4951

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Page 01 of 02

Certification Date
25-APR-2018

Invoice Number
T378710

AC00015271

PART NUMBER/NUMÉRO DE PIÈCE

505914

SOLD TO: ACIER OUELLETTE INC
VENDU À: 22 BOULEVARD J-F KENNEDY
ST JEROME QC J7Y 4B6

SHIP TO:
EXPÉDIÉ À:

ACIER OUELLETTE INC.
22 BOULEVARD J F KENNEDY
SAINT JEROME QC J7Y 4

Description: 4140/4142 CF ANN BAR
3/8 RD X 12 L R/L
HEAT: 889039

ASTM A108
Line Total: 45 LB

ITEM: 505914

Specifications:
ASTM A108 13
ASTM A331* 00

ASTM A322

CHEMICAL ANALYSIS

C	MN	P	S	SI	CU	CR	NI
0.42	0.97	0.0090	0.026	0.26	0.15	1.00	0.06
MO	SN	V	CB	AL			
0.18	0.0090	0.004	0.004	0.03			

RCPT: R440399

END-QUENCH HARDENABILITY (JOMINY - RC) : COUNTRY OF ORIGIN : USA
IN

1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
57	57	57	57	57	57	57	57	56	54	50	50	18	48	47
24	28	32												
46	44	40												

GRAIN SIZE : 5

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL
MACRO: OK

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcris du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. Nous certifions que le matériel couvert par ce rapport sera conforme aux exigences spécifiées ci-haut. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST CERTIFICAT D'ESAISS

Page 02 of 02

Certification Date
25-APR-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

AC00015271

PART NUMBER/NUMÉRO DE PIÈCE

505914

Invoice Number
T378710

SOLD TO:	ACIER OUELLETTE INC	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:		EXPÉDIÉ À:	
	22 BOULEVARD J-F KENNEDY ST JEROME QC J7Y 4B6		22 BOULEVARD J F KENNEDY SAINT JEROME QC J7Y 4

Description: 4140/4142 CF ANN BAR
3/8 RD X 12' R/L
HEAT: 889039

ITEM: 505914

ASTM A108
Line Total: 45 LB

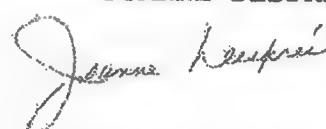
COMMENTS
reduction ratio 292.0:1
country of melt and origin: united states

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcris du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ



DESIGN <i>PF</i>	DRAWN BY <i>PF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. M4140H-R	REV. A SHEET 1 OF 1
DATE 05.02.21		TITLE 4140 ROUND BAR	SCALE 1:1
A	05.02.21	NEW ISSUE	

PURCHASE MATERIAL: AISI 4140H ROUND BAR

PER AISI 4140 OR ASTM A304-02 / -A-434-BC /

-A193-03- GRADE-B7 / -A29-03 / -A322-91 OR

UNS # - G41400

MINIMUM ULTIMATE TENSILE STRENGTH = 105 ksi

MINIMUM YIELD TENSILE STRENGTH = 66 ksi

PART NUMBER: M4140H-R | D.DDD | WHERE D.DDD = DIAMETER IN INCHES
DIA

EG. 7/8" ROUND BAR = M4140H-R0.875

RELEASED
15-02-05 *#*

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140H-R0.375
 DATE: 18/07/06

PO / BATCH NO: P0040267/S089469

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 36.75
 QUANTITY INSPECTED: 36.75
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375"
 THICKNESS RECEIVED: 0.375"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	<u>ASTM A322</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	<u>H1:889039</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT/RD</u>	SIGNED OFF BY: _____
DATE: <u>18/07/06</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

175641N
Certificate of Mill Test Results

BL VIM-000000-000

Pg 1/1

PART NO.

PO/Ref

Nous certifions que le document reproduit ici est une copie conforme du rapport fourni par le fournisseur du materiel ou les donnees resultant

de l'analyse faite par un laboratoire qualifie.

SIGNÉ PAR:

Atn:



INSPECTION CERTIFICATE № 17.120421

EN 10204 - 3.1

Consigner: KAMENSK URALSKY METALLURGICAL WORKS 5, Zavodskaya Str., Kamensk Uralsky, Sverdlovsk Region, 623405, Russia Tel: +7 (3439) 39 54 17 Fax: +7 (3439) 39 52 49			JOINT STOCK COMPANY								
Buyer: Consignee:			Quantity, pcs:		4						
P.O. No: VIM-841201			Net Weight, kg.:		2220						
Article No:			S.G. No:		N17063						
			Item No:		1.5						
			Package No:		609317						
Description of Goods: Plates			Requirements on the Product:								
Grade of Product			Dimensions, Inch (mm)		Material conforms to quality of alloy: 6001 T651						
			1.75"X48.5"X144.9" 44.450X1231.9X370.3		Product conforms to all requirements of: (ASTM E205-14; SAE AMS-QQ-A-250/11A (2008); SAE AMS-4027 Rev. N (2014). This product conforms to European Union RoHS Directive 2011/65/EU)						
Mechanical Properties											
The Condition of Tested Standards	Lot No.	Heat lot No.	HT Charge No.	Sampling direction	Tensile Strength, Rm / CuI kgf		Yield Strength, Rp0.2% / Cleching test kgf		Elongation, %		Hardness, HBW
					min	max	min	max	min	max	
Required				LT	42.0	-	35.0	-	8	-	
	846735	12-5159	06037	LT	47.4	47.6	43.2	44.6	12.2	13.8	
Chemical Composition, %											
Element	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr	Zinc Zn	Titanium Ti	Other Elements		Aluminum Al
Required	0.40 - 0.6	0.7	0.15 - 0.40	0.15	0.8 - 1.2	0.04 - 0.35	0.25	0.15	Each	Total	remainder
Contains	0.66	0.32	0.16	0.04	0.9	0.05	0.23	0.10			
Element	-	-	-	-	-	-	-	-	Each	Total	Aluminum Al
Required	-	-	-	-	-	-	-	-	0.05	0.15	remainder
Contains	-	-	-	-	-	-	-	-	0.05	0.15	remainder
Other Tests											
Method	Macro-structure	Micro-structure	UT	Kte	Electro-conductivity, IACS%	SCF	Content H2 of metals cm3/100gr	Raw material used for manufacturing supplied products was tested for compliance with International radiation safety regulations during incoming inspection. Russia is country of melt and manufacture. No Weld Repair			
								STP 10144-2012	MAX0.25	0.17	
Result	-	-	-	-	-	-	-				

On behalf:

KUMZ J.S.C.

Date:

10.06.2017

QC Inspector

Zyryanova K.V.

Inspection Department Engineer

Alechina N.V.



The Certificate has been agreed electronically.

Form № QAC/3-003, Revision 03

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: M6061-T6/T62/T651 ALUMINUM SHEET OR PLATE
 QQ-A-250/11 OR AMS-QQ-A-250/11
 OR AMS 4025, OR 4027
 OR ASTM B209

SPECIFICATION:

PART NUMBER:

M6061T6S | XXX | W | WWW |
THK | WIDTH |

WHERE "XXX" = THICKNESS (IN INCHES)
 AND "W,WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063

EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

XXX BY 4FT BY 8FT FOR SHEET

PREFERRED SIZE:

C	ADD PLATE AND T6S1 SPEC.C REFORMAT DWG. ADD B209 SPEC (ZN DB-1). REF PART 08-0220A NEW ISSUE	ML CP RF	17.12.13 09.07.13 01.06.08
REV.	DESCRIPTION	BY	DATE
DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	A	
DRAWN CHECKED MFG. APPR. DE APPR. DATE	ML NO JFS HS CP	REVISION NO. TITLE NTS	REV. C SHEET 1 OF 1 COPYRIGHT © 2010 BY DART AEROSPACE LTD

APPROVED


 2010 MAR 13 40
 E&J 18-685

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T651.750X10.000
 DATE: 18/07/06

PO / BATCH NO.: P0040267/5089472

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.750"
 THICKNESS RECEIVED: 1.750"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	<u>Y</u> N	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> N	<u>ASTM B209</u>
CORRECT THICKNESS	<u>Y</u> N	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> N	<u>HT: 12 - 5159</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u> N	
CORRECT M# ON THE MATERIAL	<u>Y</u> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ P.O.</u>	SIGNED OFF BY: _____
DATE: <u>18/07/06</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

ASTM A582

M303RD DDD

DIA.

WHERE "D,DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

△
SPECIFICATION
PART NUMBER:

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

ASTM A582

M303RD DDD

DIA.

WHERE "D,DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

△
SPECIFICATION
PART NUMBER:

RELEASER
2010-02-02
AN

B	REFORMAT DWG. ADD SPECS (ZN 08-1).	CP	10/01/05
A	REF PAR OR-020A	DS	01/12/20
	NEW ISSUE	BY	DATE
REV			
DESIGN	✓	DESCRIPTION	DART AEROSPACE LTD
DRAWN		DRAWING NO.	HAWKESBURY, ONTARIO CANADA
CHECKED		REV. B	SHEET 1 OF 1
MFG. APPR.		M303R	SCALE
APPROVED		TITLE	303 ROUND BAR
DE APPR.		DATE	10/01/05
		COPYRIGHT	2001 BY DART AEROSPACE LTD
		NTS	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 303R1.000
 DATE: 18/07/06

PO / BATCH NO.: P0040267/5289464

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12'
 QUANTITY INSPECTED: 12'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.00"
 THICKNESS RECEIVED: 1.00"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	Y <u>N</u>	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	Y <u>N</u>	
CORRECT MATERIAL PER M-DRAWING	Y <u>N</u>	ASTM A582
CORRECT THICKNESS	Y <u>N</u>	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	Y <u>N</u>	H7: 620M
CORRECT MATERIAL IDENTIFICATION	Y <u>N</u>	
CORRECT M# ON THE MATERIAL	Y <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT/PD</u>	SIGNED OFF BY: _____
DATE: <u>18/07/06</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

6787
TPI Work Test Certificate



TUBE INVESTMENTS OF INDIA LIMITED
TUBE PRODUCTS OF INDIA - MODULE - 1
POST BOX NO.4 & 18, M T H ROAD, AVADI, CHENNAI - 600054



Customer Order No.	:	TC No	: PAE/8C17A0113
		Date	: 05-OCT-17
Description Specification Condition Bundle No's	: PRECISION STEEL TUBES - CDW : ASTM A513/A513M-15 T5C1020 : SRA : 017016898,017016899,017016900,017016901,017016996,017016997,017016998,017016999,017017000	Invoice No	: 3002020000299
		Invoice Date	: 27-SEP-17
		Job /Batch No	: RBCL1709289
Cust Part No	:		
Bundle Tagging	:		
Tube Marking	:		
P. Uom	:		
Size	: CUSTOMER SIZE /CONDITION /QUANTITY /GROSS WEIGHT /TAG MARKING /WO.NO. / SPEC & GRADE /DESTINATION / BUNDLE NO /COUNTRY OF ORIGIN. : P.O.NO. /TPI-ED /SIZE /SPEC /CONDITION/ TAG MARKING/ HEAT NO. /MADE IN INDIA. : Inches : 0.875" OD X 0.635" ID X 0.120" WT X 20'- 24' R/L		

Quantity In : 18290.682 Ft

LADLE ANALYSIS :

Process	Heat No.	%C	%Mn	%P	%S	%Si	%Al	%Cr	%Ni	%Cu	%Nio
Min		.18	.3								
Max		.23	.6	.035	.035						
Obs	17202415	.191	.507	.007	.004	.008	.035				

Full Section Longitudinal Tensile Test at Room Temp				
Test	Heat No	Y.S	T.S	Elong.
Min		379	448	10
Max				
OBS	17202415	447.09	525.99	24
	MPA	MPA	%	

Rock well Hardness	Roughness	
	OD	ID
75		
HRB		
82		-

Dimensions In : Inches				
Spec	OD	ID	WT	Len
Min	.875	.63		240
Max	.88	.635		288
OBS-Min	.877	.631	0	267.283
OBS-Max	.879	.633	0	284.016

Technological Tests :		
Test	Spec	Result
Crushing		-
Flaring		-
Flattening		-
Flanging		-
Rev. Flang.,		-
Elong, Gaug, Len		-

Non-Destructive Tests :		
Test	Spec	Result
Straightness	0.76/1000 MM MAX	0.30 / 1000
Eddy Current	100	100% TESTED OK
Visual		DEFECT FREE
Ultrasonic Test		-
Application Testing		

This is to certify that the goods are supplied as per the purchase order and specification Requirements

Prepared by : N. Aymanal

Quality Shift Incharge Signature:

N.M
Mathavan.M
Mgr-Quality-IBP-TP

for Tube Investments of India
Unit: Tube Products of India

TC/ST/WOT
08/08/2020

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: ASTM A513 TYPE 5 (1020/1026) SEAMLESS ALLOY STEEL ROUND TUBING (DOM)

SPECIFICATION:

ASTM A513 TYPE 5

WHERE D.DD IS OUTSIDE DIAMETER IN INCHES
WHERE T.TT IS WALL THICKNESS IN INCHES
FIG. 3/4" ROUND TUBING WITH 120° WALL THICKNESS

THE JOURNAL OF CLIMATE VOL. 15, NO. 10, OCTOBER 2002

DART AEROSPACE		Headquarters: Ontario, Canada
TITLE: ASTM A513 TYPE E (1020/1020) ALLOY STEEL ROUND TUBING (DOM)		
PART NO.	MT-A513-T	REV B
TOOL NO.		
UNLESS OTHERWISE SPECIFIED: STAINLESS STEEL IS NOT ALLOWED DIMENSIONS ARE IN INCHES TOLERANCES ARE AS PER ASME Y14.5M-1994 DIMENSIONS ARE NET FINISHING DIMENSIONS ARE AS PER ASME Y14.5M-1994 TOLERANCES: XX+/-0.015		
DESIGNED BY:	INITIALS AND DATE	FRACTIONS 1/16
VM 17/12/13	VM 12/11/2017	ANGLES 5.5°
CHECKED BY:	XX+/-0.015	ROUGHNESS
INFO REVIEWED BY:	XX+/-0.015	
APPROVED BY:	ML 12/20/2017	SCALE: 1:100
COPYRIGHT © DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED, COPIED OR USED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.		

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-AS13-T-0.8750WD.120
 DATE: 18/07/06

PO / BATCH NO.: P0040267/5089470

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 107 ft
 QUANTITY INSPECTED: 107 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.8750 "
 THICKNESS RECEIVED: 0.8750 "
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>ASTM A 513 Types</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>HT:17202415</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1/PD</u>	SIGNED OFF BY: _____
DATE: <u>18/07/06</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in